

# THE JOHNS HOPKINS UNIVERSITY

BALTIMORE, MARYLAND 21218

DEPARTMENT OF BIOLOGY

3 March 1988

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Dear Michael:

You are a phenomenon. Libby and I were deeply touched by your phone call last night to send us anniversary wishes. I have never known anyone else who has a brain that is full of warmth and friendship and, at the same time, has built into it a superconducting filing system. The fact that you called us at 3 o'clock in the morning Israel time was particularly impressive.

It sounds as though the Sela tribe is busy and doing well. We were very pleased to hear that Sarah is having such good luck with her job with the orchestra and has developed into a corporation executive. Actually, her activities are probably a blessing since she is fundamentally a very vigorous person and had a lot of time on her hands when the operation of the President's house was removed from her job description.

I was not able to catch enough of the details of your recent trip to Moscow and, most recently, to Munich, let alone India. I hope very much that we might be able to arrange a trip to Israel sometime this Spring, perhaps at the time of the international supporting groups meeting in Jerusalem. It might be a little tricky because I have been invited to Korea to help celebrate the anniversary of their medical school of which they are very proud, and they speak of the middle of May as a mostly likely time.

Our traveling has been extensive enough. The two weeks in Taiwan were a delight and, other than having to give a few lectures to the symposium on biotechnology and to Ru Chi Huang's new Institute for Molecular Biology, we had a chance to do some marvelous sightseeing through the gorges and lakes of this interesting country. The second meeting in Paris was, naturally, interesting since it gave us a chance to meet with 75 or 80 colleagues under the direction of Elie Wiesel and Francois Mitterand. I fear that the proceedings were not particularly productive and that we did not manage to solve all the problems of the world in four days. However, it was a chance to strengthen our ties and



and impressions of Paris and to see some new things, especially the new Orsay Museum which is phenomenal. Mitterand, of course, laid on all of the classical French style, and our accommodations and receptions, etc., were pleasant and impressive.

We mentioned over the phone last night the status of Ariele Doretsky. I had already heard from Josh Lederberg that he was not in dangerous shape but in an uncomfortable situation, and that the future would be very difficult to predict. In terms of the presidency, I think we would nearly all agree that Ariele is not the ideal person, not only because of his current illness but also because, in spite of a pleasant personality and a desire to be friendly and useful, he simply does not have the flair for that kind of a job which is so much dependent on interpersonal relations and relations with committees and other groups.

My laboratory here at Hopkins is still progressing very slowly. I realize how lucky I was at the NIH to have that phenomenal flow of outstanding young colleagues and foreign visitors. The momentum was strong, and I think the productivity was good. I am still trying to build up some sort of research here that will generate the kind of enthusiasm and drive that scientific research requires. I am at the moment playing with a new toy that we got from Milligen -- an automatic peptide synthesizer that uses f-moc protecting groups rather than t-boc. The whole chemistry is much more gentle and versatile and it seems to be working. Just for fun, I am collaborating at the moment with Evangelos Moudrianakos here in the department on the synthesis of a long tail that exists on RNase polymerase II and consists, actually, of about 50,000 daltons of material at the C-terminal end of the molecule, made up entirely of repeating units of a heptapeptide. Moudrianakos seems to think that it might be involved in the modification of chromatin prior to the RNA polymerase step. It is at least a good practice session to get back into the peptide synthesis business. A second project of really greater interest, and one that might develop into a long-term effort that would attract students and colleagues, involves a study of the proteins of thermophilic bacteria. Bacteria of this type contain enzymes, homologous with those in ordinary bacteria, that apparently begin to show activity only in temperatures above 70° or 80°. I have just completed making a silica-based affinity chromatography column carrying the ligand for beta galactosidase, and I hope to study the formation of the active center of this enzyme from *Thermus* *Furiosus* as the temperature is raised and approaches 100° which is where these organisms grow. With any luck, the whole project could develop into the isolation and characterization of a number of enzymes that are active and stable only at high temperatures and perhaps some old-fashioned covalent sequence work around the active centers might come out of the whole project.



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I look forward to a chance to sit down with you and rehash the past and the present. In the meantime, Libby and I send you and Sarah and Tamar and Orly and Irit and theirs, all our love and, as it so happens this being March 2, a Happy Purim and a good Pesach.

Much love,

*Chris & Libby*

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